Kindergarten 2.1.1 Use sensory descriptors to describe objects.

Purpose:

- The students will identify similar animals by using sounds.

Materials needed:

- None

Instructions:

- Assign each child the name of an animal, with four having the same name.
- Tell the students they have to find three other students that have the same animal using the sound of the animal only.
- Once they have their group of four, the group has to sit down.
- You can then review each group's animal.

Adaptations:

- None

References:

1st Grade 4.1.4 Describe the effects of weather on the earth. (erosion, floods, and tornadoes)

Purpose:

- The students will understand the effects of weather on the earth.

Materials needed:

- Two - 9 x 13 pans of dirt

Instructions:

- Review the words erosion, floods, and tornado.
- The first concept will be erosion. The student will get to skip up to the pan of dirt and dig or move the dirt around to show the effects of erosion.
- The second concept will be flooding. The student will have a cup of water and will dump it into the pan to show the effects of flooding.
- The third concept will be tornadoes. The students will stand by their desk and twirl around about fifteen times. This effect will hopefully give them an idea of what happens in the form of a tornado when the students get dizzy they will fall to the floor.
- As a class, we will discuss the effects and dangers of erosion, floods and tornadoes.

Adaptations:

- None

References:

1st Grade 3.1.1 Describe life needs of animals, including people.

(food, air, and water)

Purpose:

- The students will understand life needs of animals and people.

Materials needed:

- You may want to be prepared with questions about the needs of our life and how we survive with food, air, and water – to go along with the game.

Instructions:

- This activity can be played like "Simon Says".
- Stand up and jump if you believe we need food to live.
- Stand up and do a sit up if we should drink at least one glass of water a day.
- You may continue on with questions, but always start with stand up and then give command.
- You may have the kids join in and help after you have played the game a few times.

Adaptations:

- None

References:

Kindergarten

2.3.1 Explore magnetism, describe its effect on various materials, observe that magnetic force can pass through various materials, and some magnets have useful applications.

Purpose:

- The students will understand the use of magnets and the different effects on different materials.

Materials needed:

- A variety of magnets

Instructions:

- The students will play "magnet attack".
- The boys and girls will each have a magnet and be jumping, hopping, or skipping within the classroom to find items that attract to the magnet.
- Continue the game for a set period of time.
- Conclude the activity with a discussion on what objects the magnets attracted.

Adaptations:

- None

References:

Kindergarten 4.1.1 Explore how shadows are made.

Purpose:

- The students will understand what a shadow is.

Materials needed:

- Sunny Day!!!

Instructions:

- Take the students outside.
- The game will be "Shadow Says".
- The students will listen to directions and make the shadow shapes.
- Shadow says "Make a big shadow with your whole body".
- Shadow says "Make a little shadow with only using your finger".
- Shadow says "Make a shadow monster with a friend".
- You may keep going with instructions and get them to use their whole body.
- Have them jump up and down to watch their shadow move.
- Have them crawl to see if their shadow will follow them.
- Have the students also brainstorm ideas.
- Some of the examples will not include "Shadow Says" for a challenge.

Adaptations:

- None

References:

None

2nd Grade 1.2.3 Make predictions based on observations rather than random guesses.

Purpose:

- The students will learn how to make predictions.

Materials needed:

- Six jars full of something
- Three different size jars full of buttons
- Three different size jars full of cotton balls

Instructions:

- The teacher will show three full jars.
- The teacher will tell the students how many buttons are in the smallest jar and the largest jar.
- The students will find a spot to squat in the room.
- The teacher will have the students jump up for the amount of items they predict are in the middle sized jar, keeping in mind the actual count in the other two jars.
- Repeat this activity with the other the three jars and have the students do jumping jacks for their predictions.

Adaptations:

- None

References:

None

Kindergarten 2.1.2 Explore objects in terms of physical attributes.

Purpose:

- The students will describe structures and properties of matter in various states and forms.

Materials needed:

- None

Instructions:

- Number the students off so that they have formed groups of nine.
- Place the students into a formation of a 3 x 3 square.

- Teacher says, "If you have your ears pierced, begin to bounce".
- All students with their ears pierced, bounce in place.
- Teacher says, "If you have green eyes, begin to bounce".
- Continue the game until a Tic Tac Toe happens (The first three students in a row who are bouncing win).
- When the students see the three in a row they holler out, "Tic-Tac-Toe...Three in a Row!"
- Repeat as much as desired.

Adaptations:

- May create a larger rectangle to include more students
- Play a version of BINGO. Label each row and be specific with your commands. "Begin to bounce if you are in row B and are wearing glasses."
- NOTE: Physical characteristics could be prepared ahead of time and placed in a hat or on a cube of some type.

References:

1st Grade

1.2.1 Enhance observations by using senses and to identify differences in properties.

Purpose:

- The students will understand the senses.

Materials needed:

- Each child will need a Hershey Kiss or some form of candy

Instructions:

- The teacher will place a Hershey Kiss in the hand of each student.
- Using each of your senses try to figure out the object placed in your hand.
- Start with touch and have the boys and girls share characteristics of the objects.
- Also, do smelling, hearing, tasting, and seeing. Discuss each sense as you go.
- Remind the students that our mouths only open for tasting!

Adaptations:

- You may choose any piece of candy.

References:

Kindergarten 3.1.1 Sort living from non-living things.

Purpose:

- The students will identify living and non-living things.

Materials needed:

- Models of living and non-living objects (plastic dog or picture cards)
- Large paper bags
- Two hula-hoops

Instructions:

- The teacher will divide the boys and girls up into teams. Each team with have a paper bag filled with examples of living and non-living objects. The teams and the amount of objects will be determined by the class size.
- The two hula-hoops will be labeled "Living" and "Non-living". The teacher will place them on the floor in front of the teams.
- When the teacher gives the command to begin, the first student from each team will reach in the bag and pull out an item. They will then run to the correct hula-hoop and place the object inside the hula-hoop.
- The students will run and tag the hand of the next student who will then reach in the bag and select another item. The race will continue until all the bags are empty.
- At the conclusion of the activity, the class will discuss the items placed in both hula-hoops.

Adaptations:

- None

References:

1st Grade

2.2.1 Experiment with water to determine how common materials interact with it. (floating, sinking, dissolving)

Purpose:

- The students will understand how common materials either float, sink, or dissolve.

Materials needed:

- Pail full of water
- Rock, soap, rubber ducky, straw, and other objects that you have available that would work for this project

Instructions:

- All of the students will have an object in their hand.
- The first student will wave their object in the air.
- The other boys and girls will predict whether the object will sink, float, or dissolve.
- The student will take baby steps up to the pail of water and see if their object will float, sink, or dissolve.
- The student will watch to see what it does and then report back to the other students.
- The student will call on someone else to take baby steps up to the pail of water to see what will happen to their object, and then he/she will report.
- Continue doing until everyone has had a turn.

Adaptations:

- None

References:

Kindergarten 4.1.2 Explore how shadows are made.

Purpose:

- The students will explore how shadows are made.

Materials needed:

- None

Instructions:

- Take the students outside at different times during the school day to play shadow tag.
- Have the boys and girls predict when they believe their shadow will be the longest and when it will be the shortest.
- Discuss how the position of the sun affects the size of your shadow.

Adaptations:

- None

References:

Kindergarten 2.3.2 Describe the motion of various objects found in their

world.

1st Grade 2.3.2 Describe how pushes or pulls can change motion of an

object.

2nd Grade 2.3.2 Describe how force can be used to make objects move.

Purpose:

- The students will understand and be able to describe motion.

Materials needed:

- Each student brings a small item with wheels

Instructions:

- The students will sit on the floor in a square.
- The teacher will ask the students on one side of the square to push their item across the floor to the person sitting across from them.
- Each side of the square will take a turn.
- The teacher will lead the students in a discussion on motion.

Adaptations:

- None

References:

2nd Grade 2.3.3 Explore forces that move objects. (gravitation, magnetic, electrostatic)

Purpose:

- The students will understand gravitation.

Materials needed:

- Any kind of balls

Instructions:

- Pair up or group your students.
- Give each pair or group a ball.
- Have each group experiment with the ball.
- Have them throw the ball up in the air and observe what the ball does.
- Throw the ball back and forth to each other.
- Discuss what happens if someone does not catch the ball.
- Kick the ball and have the students observe what happens to the ball.
- This activity would be a good way to introduce gravity.
- This activity could be used to generate a scientific discussion about each of the student's observation.

Adaptations:

- None

References:

Kindergarten 2.2.2 Observe physical changes in matter. 1st Grade 2.2.3 Observe physical changes in matter.

Purpose:

- The students will understand the effects of matter and its changes.

Materials needed:

- Popcorn and a popcorn popper

Instructions:

- Discuss the elements of matter solid, liquid, or gas.
- Have the children sit on the floor and pretend they are a kernel of corn.
- The students will pop into popcorn.
- Discuss what happens and how the affect of matter changes from a kernel to a piece of popcorn.
- The process may also be modeled with popcorn and a popper by moving their legs and arms in a robotic motion.

Adaptations:

- "Matter is a solid, liquid, or gas – a solid, liquid or gas – a solid, liquid or gas". You may sing this song and clap or snap to the beat to the "Farmer In the Dell"

References:

1st Grade 1.2.2 Measure length, mass, and volume using non-standard and

standard units when appropriate.

2nd Grade 1.2.2 Measure length, volume, mass, and temperature in

appropriate units.

Purpose:

- The students will measure water in pints, cups, and/or ounces.

Materials needed:

- Sponge and 2 buckets (for each group)
- Timer
- Masking tape

Instructions:

- The teacher will divide the class into groups of three to five.
- The teacher and students will measure and mark a starting line and measure another 50 feet for the end line (mark with masking tape).
- The students will dip their sponge into the bucket of water at the start line and run to the finish line and squeeze out the water to fill their teams' bucket.
- The relay will continue through all of the team members.
- The students will measure the water in the buckets using pints, cups, and ounces.
- The team with the most water will win.

Adaptations:

- Students may also check the temperature of the water in the buckets.

References:

- www.education-world.com